NATIONAL SECURITY AGENCY
CENTRAL SECURITY SERVICE
FORT MEADE, MARYLAND

30 March 2009

Evaluated Products List - Degausser

EVALUATED PRODUCTS LIST - DEGAUSSER

INTRODUCTION

1. The EPL-*Degausser* (Evaluated Products List – Degausser) specifies the model identification of current equipment units that were evaluated against and found to satisfy the requirements for erasure of magnetic storage devices that retain sensitive or classified data. A commercial production unit of each model of degausser was evaluated against NSA/CSS requirements for erasure of sensitive or classified magnetic storage devices. Listing of a product on the EPL-Degausser does not constitute endorsement of the product by the USG or NSA/CSS. It merely indicates that the evaluated degausser has met the applicable NSA/CSS performance requirements. Moreover, though listed in the EPL-Degausser, customers that acquire these products should have them re-tested periodically according to manufacturer's recommendations.

2. Magnetic storage devices are defined by their magnetic *coercivity* in units of Oe (*Oersteds*). Degaussers listed in this document are defined by the coercivity of the magnetic storage devices that can be erased. Degaussers in the EPL-Degausser are defined by the ability to erase tape storage devices and the ability to erase disk storage devices. Tape storage devices are defined as any product that contains magnetic tape as the recording medium. Disk storage devices are defined as any product that contains a flexible or rigid disk as the recording medium. The correct use of these degausser products will ensure that classified or sensitive data is no longer retrievable.

3. Degaussers capable of erasing disk storage devices are broken into two categories: Longitudinal (L) and Perpendicular (P). Longitudinal disk storage devices have been the norm, but since CY2006 perpendicular disk storage devices have been available. Longitudinal and perpendicular disk storage devices will be marketed side by side for a few more years and then perpendicular disk storage devices will be the norm. Due to the different magnetic fields required to erase each technology, degaussers are capable of either erasing longitudinal disk storage devices or both longitudinal and perpendicular disk storage devices.

4. Degaussers are ineffective in erasing optical and solid state storage devices.

NOTE: IN ADDITION TO DEGAUSSING, CERTAIN ADMINISTRATIVE PROCEDURES MAY BE REQUIRED BEFORE DEGAUSSED MAGNETIC STORAGE DEVICES MAY BE DECLASSIFIED. CONSULT YOUR SECURITY OFFICER OR MANAGER FOR GUIDANCE IN THIS REGARD.

5. Proper use of this equipment is necessary to ensure inadvertent disclosure of classified or sensitive information does not occur. Accordingly, users having operational questions about the equipment should direct their questions to the manufacturer. Questions regarding security requirements should be addressed to your Security Officer or Manager.

6. Additional equipment included is a NSA/CSS evaluated magnetic field verification device used to detect and measure a degausser's magnetic field.

7. Companies wishing to submit a product for evaluation should contact in writing:

National Security Agency
ATTN: LL43 Media Technology Center, Suite 6877
9800 Savage Road
Fort George G. Meade, MD 20755-6877
Voice 301.688.1053, Facsimile 301.725.8007

ELECTROMAGNETIC DEGAUSSER EQUIPMENT

8. Drawer Type Degaussers: These are electromagnetic degaussers that provide automatic one pass operation for tape storage device erasure. Models certified for disk storage device erasure can be used to erase disks 3.5" or smaller. The disk must be placed horizontally, degaussed once, turned over and degaussed a second time. All extraneous steel shielding materials (e.g., cabinets, casings, and mounting brackets), but not the hard disk assembly, must be removed before degaussing. The degaussers must be operated at their full magnetic field strength. The erasure of hard disk drives causes damage that prohibits their continued use.

NOTE: ADAPTORS MAY BE NECESSARY TO ACCOMMODATE THE VARIOUS SIZES OF STORAGE DEVICE PRODUCTS.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Data Devices International 2600 Mission Street San Marino, CA 91108-1676 626.799.6545 ATTN: David Partridge	Cambrian	350	Not Tested
Data Security, Incorporated 729 Q Street Lincoln, NE 68508 402.434.5959 800.225.7554 www.datasecurityinc.com ATTN: Renee Schafer rschafer@telesis-inc.com	Type I, 911-0000	350	Not Tested
Data Security, Incorporated	Type HD-2000, 940-0001	750	L-1500
Data Security, Incorporated	Type HD-3000, 905-0001	750	L-1800

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Garner Products 620 Commerce Drive Suite C Roseville, CA 95678 800.624.1903	CF750	750	Not Tested
Data Security, Incorporated	Type II-A, 930-0000	1000	Not Tested
Data Security, Incorporated	Type III, 943-0001	1700	Not Tested

9. Conveyor Type Degaussers: These are electromagnetic degaussers that are continuous duty conveyor belt types and provide one pass erasure for tape storage devices.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Garner Products 620 Commerce Drive Suite C Roseville, CA 95678 800.624.1903	2700	350	Not Tested

10. Chamber Type Degaussers: These are electromagnetic degaussers that provide automatic one pass operation for disk and tape storage device erasure. They can be used to erase disks 3.5” or smaller. All extraneous steel shielding materials (e.g., cabinets, casings, and mounting brackets), but not the hard disk assembly, must be removed before degaussing. The degaussers must be operated at their full magnetic field strength. The erasure of hard disk drives causes damage that prohibits their continued use.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Data Security, Incorporated 729 Q Street Lincoln, NE 68508 402.434.5959 800.225.7554 www.datasecurityinc.com ATTN: Renee Schafer rschafer@telesis-inc.com	HD-6600	2800	L-4200
Data Security, Incorporated	HD-1T	2800	L-5000 P-5000

PERMANENT MAGNET DEGAUSSER EQUIPMENT

11. Hand Degaussers: These are hand held permanent magnet degaussers. To degauss disk storage devices, insert the degaussing wand into the disk pack so that the active magnetic portion completely covers the recording surface of the disk from hub to perimeter. Wipe each active disk surface (top and bottom) at least three times with the magnet. If disks are part of a sealed hard disk drive assembly, they must be removed from

the assembly for degaussing. The erasure of hard disk drives causes damage that prohibits their continued use.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Applied Magnetics Laboratory, Inc. 1404 Bare Hills Rd. Baltimore, MD 21209 410.583.2100	AML-6KG	Not Tested	L-5000
Proton Data Security 9703 South Dixie Highway Suite 207 Miami, Florida 33156 305.670.5202 www.protondata.com ATTN: John Lobo johnlobo@protondata.com	1100	Not Tested	L-5000
Security Engineered Machinery 4420-B Lottsford Vista Road Lanham, MD 20706 800.645.1157 301.735.7100 ATTN: Terry Creek	1100	Not Tested	L-5000
Whitaker Brothers Business Machines, Inc. 12410 Washington Avenue Rockville, MD 20852 800.243.9226 301.230.2800 www.whitakerbrothers.com ATTN: Vivian Kambanis gsa@whitakerbrothers.com	102-DG	Not Tested	L-5000

12. Single Pass Slot Degaussers: These are enclosed permanent magnet degaussers that require one pass for proper erasure. The erasure of hard disk drives causes damage that prohibits their continued use.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Applied Magnetics Laboratory, Inc. 1404 Bare Hills Rd. Baltimore, MD 21209 410.583.2100	Magnastroyer AML-MS1	2150	L-750

13. Dual Pass Slot Degaussers: These are enclosed permanent magnet degaussers. To properly degauss disk storage devices, pass the disk through the entry slot, turn the disk 90 degrees and slide the disk through the slot again. The erasure of hard disk drives causes damage that prohibits their continued use.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Proton Data Security 9703 South Dixie Highway Suite 207 Miami, Florida 33156 305.670.5202 www.protondata.com ATTN: John Lobo johnlobo@protondata.com	1090	Not Tested	L-750
Security Engineered Machinery 4420-B Lottsford Vista Road Lanham, MD 20706 800.645.1157 301.735.7100 ATTN: Terry Creek	1090	Not Tested	L-750

14. Drawer Degaussers: These are enclosed permanent magnet degaussers that provide automatic one pass operation for disk and tape storage device erasure. All extraneous steel shielding materials (e.g., cabinets, casings, and mounting brackets), but not the hard disk assembly, must be removed before degaussing. The erasure of hard disk drives causes damage that prohibits their continued use.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Data Security, Incorporated 729 Q Street Lincoln, NE 68508 402.434.5959 800.225.7554 www.datasecurityinc.com ATTN: Renee Schafer rschafer@telesis-inc.com	APM-10	2800	L-5000 P-5000
Data Security, Incorporated	HPM-1	2800	L-5000 P-5000
Data Security, Incorporated	HPM-1A	2800	L-5000 P-5000
Data Security, Incorporated	HPM-4	2800	L-5000 P-5000
Garner Products 620 Commerce Drive Suite C Roseville, CA 95678 800.624.1903	REM-1400NSA	2800	L-5000 P-5000

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Red River Computer 85 Mechanic Street Lebanon, NH 03766 603.448.8880 www.redriver.com ATTN: Kurt Gantrish	ME-RRC3	2800	L-5000 P-5000
Red River Computer 85 Mechanic Street Lebanon, NH 03766 603.448.8880 www.redriver.com ATTN: Kurt Gantrish	ME-RRC3M	2800	L-5000 P-5000
Security Engineered Machinery/ Fujitsu 4420-B Lottsford Vista Road Lanham, MD 20706 800.645.1157 301.735.7100 ATTN: Terry Creek	ME-P3	2800	L-5000 P-5000
Security Engineered Machinery/ Fujitsu	ME-P3E	2800	L-5000 P-5000
Security Engineered Machinery/ Fujitsu	ME-P3M	2800	L-5000 P-5000

15. Conveyor Type Degaussers: These are enclosed permanent magnet degaussers that are continuous duty conveyor belt types and provide one pass erasure for disk and tape storage devices. All extraneous steel shielding materials (e.g., cabinets, casings, and mounting brackets), but not the hard disk assembly, must be removed before degaussing. The erasure of hard disk drives causes damage that prohibits their continued use.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Data Security, Incorporated 729 Q Street Lincoln, NE 68508 402.434.5959 800.225.7554 www.datasecurityinc.com ATTN: Renee Schafer rschafer@telesis-inc.com	LM-4	2800	L-5000 P-5000
Data Security, Incorporated	LM-4E	Not Tested	L-5000 P-5000

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Dexter Magnetic Technologies 400 Karin Lane Hicksville, NY 11801 908.668.4821 ATTN: Thomas Devaney	U5000	2800	L-5000 P-5000

DEGAUSSER MAGNETIC FIELD VERIFICATION DEVICE

MANUFACTURER	MODEL
Data Security, Incorporated 729 Q Street Lincoln, NE 68508 402.434.5959 800.225.7554 www.datasecurityinc.com ATTN: Renee Schafer rschafer@telesis-inc.com	Field CheckR

DEGAUSSERS NO LONGER MANUFACTURED

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Ampex Corporation	SE20	350	Not Tested
Ampex Corporation	SE750	750	Not Tested
Applied Magnetics Laboratory, Incorporated	Data Muncher	Not Tested	L-350
Bell & Howell Company	TD-2903-4B	350	Not Tested
CMC Technology Corporation	TD-800	350	Not Tested
Computer Link Corporation	CF750	750	Not Tested
Computer Link Corporation	515	350	Not Tested
Computer Link Corporation	520	350	Not Tested
Computer Link Corporation	530	350	Not Tested
Computer Link Corporation	538	350	Not Tested
Computer Link Corporation	540	350	Not Tested
Consolidated Electrodynamics	TD-2903-4A	350	Not Tested
Data Security, Incorporated	HD-6000	2500	L-3800
Data Security, Incorporated	Type II, 902-0001	750	L-1800
Datatape, Incorporated	HDD-2000	750	L-1500
Datatape, Incorporated	TD-1700	1700	Not Tested

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Datatape, Incorporated	TD-2903-4B	350	Not Tested
Datatape, Incorporated	TD-350	350	Not Tested
Datatape, Incorporated	TD-500	350	Not Tested
Datatape, Incorporated	TD-750	750	L-1800
Datatape, Incorporated	TD-900	900	L-1800
Electro-Matic Products Company	2PTFB15-17	350	Not Tested
Electro-Matic Products Company	2PTFB15-18	350	Not Tested
Electro-Matic Products Company	2PTFB15-113	350	Not Tested
Electro-Matic Products Company	HE15FB-4	750	Not Tested
General Kinetics Incorporated	K80	350	Not Tested
General Kinetics Incorporated	K90	350	Not Tested
Hewlett Packard Company	3603A	350	Not Tested
Integra Technologies Corporation	D530	350	Not Tested
Integra Technologies Corporation	D538	350	Not Tested
Integra Technologies Corporation	D538-II	750	Not Tested
Integra Technologies Corporation	D540	350	Not Tested
Integra Technologies Corporation	I600-F4	Not Tested	L-350
IXI, Incorporated	5661C	350	L-2200
J.C. Nickels, Incorporated	1084 Bit Scrubber	Not Tested	L-350
KYBE Corporation	1100	350	Not Tested
Metrum-Datatape	HDD-2000	750	L-1500
Metrum-Datatape	TD-1700	1700	Not Tested
Metrum-Datatape	TD-350	350	Not Tested
Metrum-Datatape	TD-750	750	L-1800
Metrum-Datatape	TD-900	900	L-1800
Precision Methods, Incorporated	2000	Not Tested	L-350
Proton Engineering, Incorporated	1084	Not Tested	L-350
Rimage Corporation	5661C	350	L-2200

DEFINITIONS

16. Coercive Force – A negative or reverse magnetic force applied for the purpose of reducing magnetic flux density.

17. Coercivity – A property of magnetic material, measured in Oersteds, used as a measure of the amount of *coercive force* required to reduce the magnetic induction to zero from its remanent state. Generally used as a measure of difficulty with which magnetic storage devices can be degaussed.

18. Degausser – An electrical device or permanent magnet assembly which generates a coercive magnetic force for the purpose of degaussing magnetic storage devices or other magnetic material.

19. Degaussing (or Demagnetizing) – Process for reducing the magnetization of a magnetic storage device to zero by applying a reverse (coercive) magnetizing force,

rendering any previously stored data unreadable and unintelligible, and ensuring that it cannot be recovered by any technology known to exist.

20. Oersted (Oe) – The unit of measure of a magnetic field.

COERCIVITIES

Magnetic Storage Device	**Oe**
9-Track Reel-to-Reel Computer tape	300
TK50, TK70	350
3480, 3490E	520
SLR1, SLR2, TR-1, DC2120, DC6150, DC6525	550
SLR3, SLR4, SLR5, TR-3, DC9100, DC9120, ID-1, SLR24, SLR32, TR-4, ADR30, ADR50, ADR2-120	900
Mammoth 8mm, AIT-1 8mm, VXA-1 8mm	1320
M2 Mammoth2 8mm, VXA-2 8mm 230m	1350
AIT-2 8mm	1380
AIT-3 8mm, AIT-4 8mm, S-AIT-1 ½”	1400
Redwood SD-3	1515
DLTtape III, DLTtape IIIXT	1540
DD-2 19mm	1550
DTF-1	1579
DDS1: 4mm60m, 4mm90m	1590
D8: 8mm 112m, 8mm 160m	1600
MagstarMP: 3570-B, 3570-C, 3570-C/XL, Magstar: 3590, 3590-E, STK-9840, STK-T9940	1625
TR-5, SLR40, SLR50, SLR60, SLR100, TR-7 (Travan 40 GB), SLR75, SLR140	1650
DDS2 4mm 120m	1750
DLTtape IV, DLTtape VS1, NCTP, DD-2QD (Quad Density) 19mm, LTO-Ultrium1	1850
SuperDLTtape1	1900
LTO-Ultrium2	2150
DDS3 4mm 125m	2250
DTF-2	2300
DDS4 4mm 150m, DAT-72 4mm 170m	2350

Enterprise 3592, STK-T10000 (T10K)	2500
Super DLTtape II	2600
DLTtape S4, LTO-Ultrium3	2650
LTO-4	2710
5 ¼" 360KB DD Minidisk	300
3.5" 720KB DD Microdisk, 5 ¼" 1.2MB HD Minidisk	650
3.5" 1.44MB HD Microdisk	720
SuperDisk 120MB	1500
Zip 100 MB Disk	1550
Zip 250 MB Disk, Zip 750 MB Disk	2250